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添付公開書類:

— 国際調査報告書

2 文字コード及び他の略語については、定期発行される各 PCT ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

(54) Title: THREE-DIMENSIONAL STRUCTURE OF LIPOCALIN-TYPE PROSTAGLANDIN D SYNTHASE AND UTILIZATION OF THE SAME

(54) 発明の名称: リポカリン型プロスタグランジン D 合成酵素の 3 次元立体構造及びその使用

(57) Abstract: Crystals of lipocalin-type prostaglandin D synthase are produced and analyzed by X-ray diffractometry to give the three-dimensional structure of the enzyme based on which an inhibitor of the enzyme can be designed and selected.

(57) 要約: リポカリン型プロスタグランジン D 合成酵素の結晶を作成し、その X 線回折から該酵素の三次元立体構造を得、それより該酵素の阻害剤を設計、選択することができる。

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/16233

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C12N9/90, C12N9/99, C12N15/09, C12Q1/533, C07D401/06,
G06F17/30, G06F17/50, G01N33/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C12N9/90, C12N9/99, C12N15/09, C12Q1/533, C07D401/06,
G06F17/30, G06F17/50, G01N33/50

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

SwissProt/PIR/GeneSeq, GenBank/EMBL/DDBJ/GeneSeq, WPI (DIALOG),
BIOSIS (DIALOG), MEDLINE (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	Eguchi, N. et al., Lack of tactile pain (allodynia) in lipocalin-type prostaglandin D synthase-deficient mice., Proc.Natl.Acad.Sci. USA., Vol.96, No.2, pages 726 to 730, (1999)	4, 5 1-3, 7, 8 10
X Y A	JP 2001-103869 A (Japan Science and Technology Corp.), 17 April, 2001 (17.04.01), (Family: none)	4, 5 1-3, 7, 8 10
X Y A	Urade, Y. et al., Biochemical, structural, genetic, physiological, and pathophysiological features of lipocalin-type prostaglandin D synthase., Biochem.Biophys.Acta., Vol.1482, No.1-2, pages 259 to 271, (2000)	4, 5 1-3, 7, 8 10

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

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Japanese Patent Office

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/16233

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Kanaoka, Y. et al., Cloning and crystal structure of hematopoietic prostaglandin D synthase., Cell, Vol.90, No.6, pages 1085 to 1095, (1997)	1-3,7,8
Y	JP 2002-238553 A (The Institute of Physical and Chemical Research), 27 August, 2002 (27.08.02), (Family: none)	7,8
Y	EP 1065213 A2 (Japan Tobacco Inc.), 27 August, 2002 (27.08.02), & JP 2001-69995 A	7,8
A	Bohm, H.J. et al., The development of a simple empirical scoring function to estimate the binding constant for a protein-ligand complex of known three-dimensional structure., J. Comput.Aided Mol.Des., Vol.8, No.3, pages 243 to 256, (1994)	7,8